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MF APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	TS ATTORNEY DOCKET NO.
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09/289,507 04/09/99 DRZAIC

P INK-039

021323 WM01/0124  
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EXAMINER

NGUYEN, T

ART UNIT

PAPER NUMBER

2673

DATE MAILED:

01/24/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

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## Office Action Summary

Application No.

09/289,507

Applicant(s)

DRZAIC ET AL.

Examiner

Jimmy H. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 22-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 and 26-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some \* c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) \_\_\_\_\_.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

### Attachment(s)

- 14) ☒ Notice of References Cited (PTO-892)
- 15) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 16) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6, 7.
- 17) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 18) ☐ Notice of Informal Patent Application (PTO-152)
- 19) ☐ Other: \_\_\_\_\_.

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### DETAILED ACTION

1. This Office Action is made in response to applicant's RESPONSE TO ELECTION REQUIREMENT AND AMENDMENT, filed 12/11/2000 (entered into the file wrapper as Paper No. 10).
2. Applicant's election of Species IV in Paper No. 10 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
3. Claims 22-25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 10.
4. It is noted that in the Election Requirement dated 10/31/2000, the indication of claims 1, 22, 24, 26 and 28 being generic is incorrect, because these claims are not readable on non-elected species I as illustrated by figures 1A-1D. Therefore, no claim is currently generic to all species.
5. It is noted that the Applicant indicates claims 1-2, 26 and 27 readable on the elected species IV as illustrated in figures 3E-3M, however, Examiner find that all claims are readable on the elected species except for claims 22-25.

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*Claim Rejections - 35 USC § 103*

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-21 and 26-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobson et al. (USPN: 5,961,804).

As per claims 1-3, 5, 12-15, 17-20, 26-31 and 36, Jacobson et al. discloses a single microcapsule (320) (see fig. 6) comprising a clear particle (620), a black particle (410) and a single colored particle (610), for producing a single colored subpixel (col. 12, lines 11-22). Jacobson et al. further teaches that in a full color RGB reflective display, a white color of a pixel is formed of individual colored states red, green and blue (col. 12, lines 7-11). In other words, it would have been obvious to one of ordinary skill in the art to recognize that Jacobson et al.'s pixel as a display element is formed of three single-colored microcapsules as three single-colored subpixels. As discussed above, the claimed invention obviously reads on Jacobson et al. as follows: Jacobson et al. discloses a display apparatus comprising an electrophoretic display element including three microcapsules (320) (fig. 6A) corresponding to three claimed capsules, and a plurality of electrodes (300, 310) adjacent the display element, wherein each microcapsule (320) comprises a sphere (620) corresponding to the claimed first species, a black microparticle (410) corresponding to the claimed second species, a colored microparticle (610/630) (i.e., a red

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microparticle of the first microcapsule, a green microparticle of the second microcapsule and a blue microparticle of the third microparticle) corresponding to the claimed third species, and dyed suspending fluid (405) (col. 8, line 46). Jacobson et al. further teaches at least one of the plurality of electrodes has a size different from others of the plurality of electrodes (fig. 5B). Therefore, these claims are rejected for the reason as set forth above.

In regard to claim 21 as applied to claim 18 above, Jacobson et al. discloses that the front electrode (300) should be transparent and the rear electrode (310) may be selective (col. 8, lines 51-53). In other words, it would have been obvious to one skill in the art to recognize that Jacobson et al. obviously discloses the claimed invention as specified in claim above.

In regard to claims 4, 6-11 as applied to claim 3 above, claim 16 as applied to claim 15 above and claims 32-35 and 37 as applied to claim 28 above, Jacobson et al. further discloses that the particles may be heterogeneous in terms of physical properties and/or colors of the displays (col. 3, lines 14-17), and the colored suspending fluid may be substituted by a colorless fluid and colored particles (col. 3, lines 17-19). In other words, the selection of the particular colors of the microparticles and suspending fluid would have been an obvious matter of design choice, since such a modification would have involved a mere change in color which depends upon on the characteristic of the display, e.g., in a black and white display, black and white particles may be employed and in a full-color RGB display, green, blue and red particles may be

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employed. Therefore, it would have been obvious to obtain the invention as specified in claims above.


*Conclusion*

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy H. Nguyen whose telephone number is (703) 306-5422. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (703) 305-4938. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-9051 for regular communications and (703) 308-6606 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

JHN  
January 12, 2001

  
**BIPIN SHALWALA**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**